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**(54) Method and apparatus for signal processing.**

57 A digital demodulator for a NICAM 728 system signal has sampling and digitizing means converting the signal into a succession of digital samples. The digital samples pass through an anti-aliasing digital comb filter to a selector (decimator) that selects one sample in three and feeds it to a second digital filter. Digital matched filters for the in-phase (I) and quadrature (Q) components of the signal effect the demodulation. Carrier and symbols I tracking is carried out digitally. A pulse-width modulated automatic gain control signal is produced for controlling the amplitude of the signal applied to the sampling and digitizing means.

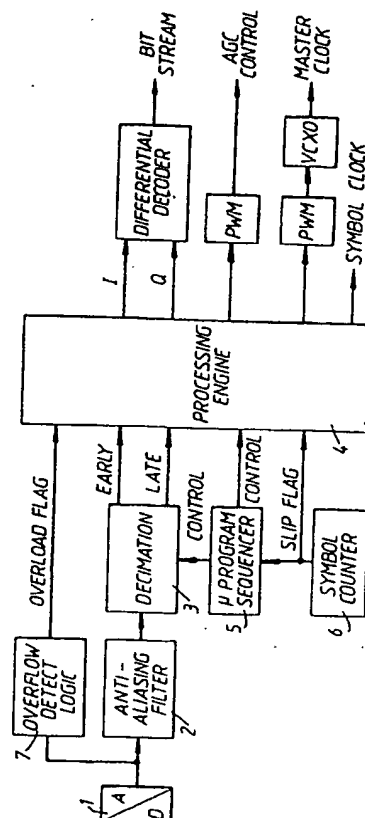


Fig. 1.



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# EUROPEAN SEARCH REPORT

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DOCUMENTS CONSIDERED TO BE RELEVANT			
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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 11 MAY 1993	Examiner HOEKSTRA A.
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

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Place of search THE HAGUE		Date of completion of the search 11 MAY 1993	Examiner HOEKSTRA A.
<b>CATEGORY OF CITED DOCUMENTS</b> X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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